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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/471,287	12/23/1999	MAKOTO MIYAGI	0557-4877-2	7229

22850 7590 08/20/2003

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1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

BRINICH, STEPHEN M

ART UNIT	PAPER NUMBER
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2624

DATE MAILED: 08/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.



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Commissioner for Patents

Office Action Summary

Application No.

09/471,287

Applicant(s)

MIYAGI, MAKOTO

Examiner

Stephen M Brinich

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,3,5,7,13,15,17,19,25 and 26 is/are allowed.
- 6) ☒ Claim(s) 2,4,6,8-12,14,16,18 and 20-24 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 6) ☐ Other: _____.

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DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 2, 4, 6, 8-12, 14, 16, 18, & 20-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 2, lines 4-5; claim 6, lines 4-5; claim 14, lines 4-5; and claim 18, lines 4-5, the phrase "wherein a distance between adjacent grids to be started to set the threshold values for the halftone cells is made as equal as possible" is unclear. Examiner's best understanding of the "adjacent grids" recited (the hexagonal cells formed from truncated square cells) implies that these "adjacent grids" are necessarily at zero distance from one another.

In claim 9, line 5 and claim 21, lines 5-6, the phrase "dividing an interior of said hexagonal cells to form sub-matrices" is unclear as to whether the dividing operation is carried out on each of the hexagonal cells or on the combination

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of plural hexagonal cells that comprises the recited single halftone cell.

Allowable Subject Matter

3. Claims 1, 3, 5, 7, 13, 15, 17, 19, & 25-26 are allowed.

4. Claims 2, 4, 6, 8-12, 14, 16, 18, & 20-24 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

5. The following is a statement of reasons for the indication of allowable subject matter:

Re claims 1, 5, 9, 13, 17, 21, 25, & 26 (and dependent claims 2-4, 6-8, 10-12, 14-16, 18-20, & 22-24), the art of record does not disclose the claimed arrangement of forming hexagonal halftone cells from truncated square arrays and combining the hexagonal halftone cells so formed into a combined single halftone cell.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kroon, Ostromoukhov et al, and Miyagi disclose examples of hexagonal halftone patterns.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen


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M. Brinich at 703-305-4390. The examiner can normally be reached on weekdays 7:00-4:30, alternate Fridays off.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Tech Center 2600 Customer Service center at 703-306-0377.

If attempts to contact the examiner and the Customer Service Center are unsuccessful, supervisor David Moore can be contacted at 703-308-7452.

Faxes pertaining to this application should be directed to the Tech Center 2600 official fax number, which is 703-872-9314.


Stephen M Brinich
Examiner
Art Unit 2624

smb
August 19, 2003